



ATTORNEY DOCKET NO. 7146.0046

D/C  
2617  
#11

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE  
PATENT APPLICATION EXAMINING OPERATIONS

Applicant: Larry Westerman                      Group Art Unit:  
Serial No.: 09/354,938                      Examiner:  
Filed: July 15, 1999  
Title: METHOD OF ELIMINATING FLICKER ON AN INTERLACED  
MONITOR

RECEIVED

APR 16 2003

Technology Center 2600

REQUEST TO WITHDRAW THE HOLDING OF ABANDONMENT  
UNDER 37 CFR 1.181

On the Basis That Proper Reply to Outstanding PTO Requirement was Mailed

RECEIVED

- Return Postcard Received -

No Fee Required

MAY 13 2003

DIRECTOR'S OFFICE  
TECHNOLOGY CENTER 2600

Chernoff Vilhauer McClung & Stenzel, LLP  
1600 ODS Tower  
601 S W Second Avenue  
Portland, Oregon 97204-3157

April 10, 2003

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Dear Sir:

The applicant in the above-identified patent application hereby petitions the Director of Patents and Trademarks to withdraw the holding of Abandonment under 37 CFR 1.181 on the basis that proper reply to outstanding PTO requirement was mailed - Return Postcard received. The evidence being sufficient to prove that the documents referred to in the Notice of Abandonment were timely filed. In accordance with 37 CFR §1.181, no fee is required at this time.

This filing is in response to the Notice of Abandonment dated March 24, 2003, (Please see Exhibit A) in connection with the above-referenced patent application. Applicant

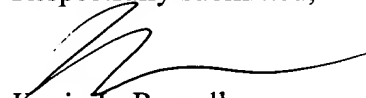
respectfully requests that this application, deemed abandoned for failure to timely respond, be reinstated because Applicant did not in fact fail to respond.

Applicant did not fail to respond to the Office Action dated August 15, 2002 (Please see Exhibit B) as stated in the Notice of Abandonment. Applicant's attorney filed a Response to the outstanding Office Action on February 5, 2003 (Please see Exhibit C). A photocopy of the Response with a Certificate of Mailing signed by Kevin L. Russell on February 5, 2003 is enclosed. Copies of the official postcards mailed to the United States Patent and Trademark Office on February 5, 2003 are dated and stamped with the United States Patent and Trademark seal, and should be sufficient to support this request that the Abandonment be withdrawn. The following is a list of documents in Exhibit C: Amendment Transmittal Form, Fee Transmittal 2003 in duplicate, Amendment, Petition for a Three Month Extension of Time, our check in the amount of \$2,058 to cover fees, and an acknowledgment postcard dated February 5, 2003. Additionally, there is a Letter to the Official Draftsperson, three pages of new drawings and an acknowledgment postcard dated February 5, 2003.

Reinstatement of the above identified patent application is respectfully requested, in light of the facts presented in Exhibit C, and additionally because it is evident that the abandonment occurred through no fault of Applicant or Applicant's attorney.

The Commissioner is hereby authorized to charge any additional fee, or credit any overpayment, to Deposit Account No. 03-1550.

Respectfully submitted,



Kevin L. Russell  
Of Attorneys for Applicant  
Tel: (503) 227-5631



ATTORNEY DOCKET NO. 7146.0046

CERTIFICATE OF MAILING

I hereby certify that this correspondence is being deposited with the United States Postal Service as First Class Mail postage prepaid in an envelope addressed to: Mail Stop Petitions, The Director of Patents, P.O. Box 1450, Alexandria, VA 23313 on April 10, 2003.

Dated: April 10, 2003

---

Kevin L. Russell

EXHIBIT A



## UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER OF PATENTS AND TRADEMARKS  
Washington, D.C. 20231  
www.uspto.gov

APPLICATION NO.	FILED DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/354,938	03/15/1999	LARRY A. WESTERMAN	KLR:7146.046	5777

7590

03/24/2003

CHERNOFF VILHAUER MCCLUNG & STENZEL LLP  
1600 ODS TOWER  
601 SW SECOND AVENUE  
PORTLAND, OR 97204

KLR 7146  
RECEIVED

MAR 31 2003

CHERNOFF, VILHAUER,  
McCLUNG & STENZEL

EXAMINER

HSIA, SHERRIE Y

ART UNIT

PAPER NUMBER

2614

DATE MAILED: 03/24/2003

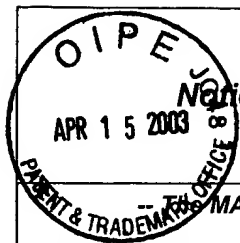
Please find below and/or attached an Office communication concerning this application or proceeding.

Abandoned

RECEIVED

APR 16 2003

Technology Center 2600



# Notice of Abandonment

Application No.

09/354,938

Examiner

Sherrie Hsia

Applicant(s)

WESTERMAN, LARRY A.

Art Unit

2614

MAILING DATE of this communication appears on the cover sheet with the correspondence address--

This application is abandoned in view of:

1. ☒ Applicant's failure to timely file a proper reply to the Office letter mailed on 15 August 2002.
  - (a) ☐ A reply was received on \_\_\_\_\_ (with a Certificate of Mailing or Transmission dated \_\_\_\_\_), which is after the expiration of the period for reply (including a total extension of time of \_\_\_\_\_ month(s)) which expired on \_\_\_\_\_.
  - (b) ☐ A proposed reply was received on \_\_\_\_\_, but it does not constitute a proper reply under 37 CFR 1.113 (a) to the final rejection.  
(A proper reply under 37 CFR 1.113 to a final rejection consists only of: (1) a timely filed amendment which places the application in condition for allowance; (2) a timely filed Notice of Appeal (with appeal fee); or (3) a timely filed Request for Continued Examination (RCE) in compliance with 37 CFR 1.114).
  - (c) ☐ A reply was received on \_\_\_\_\_ but it does not constitute a proper reply, or a bona fide attempt at a proper reply, to the non-final rejection. See 37 CFR 1.85(a) and 1.111. (See explanation in box 7 below).
  - (d) ☒ No reply has been received.
2. ☐ Applicant's failure to timely pay the required issue fee and publication fee, if applicable, within the statutory period of three months from the mailing date of the Notice of Allowance (PTOL-85).
  - (a) ☐ The issue fee and publication fee, if applicable, was received on \_\_\_\_\_ (with a Certificate of Mailing or Transmission dated \_\_\_\_\_), which is after the expiration of the statutory period for payment of the issue fee (and publication fee) set in the Notice of Allowance (PTOL-85).
  - (b) ☐ The submitted fee of \$\_\_\_\_\_ is insufficient. A balance of \$\_\_\_\_\_ is due.  
The issue fee required by 37 CFR 1.18 is \$\_\_\_\_\_. The publication fee, if required by 37 CFR 1.18(d), is \$\_\_\_\_\_.
  - (c) ☐ The issue fee and publication fee, if applicable, has not been received.
3. ☐ Applicant's failure to timely file corrected drawings as required by, and within the three-month period set in, the Notice of Allowability (PTO-37).
  - (a) ☐ Proposed corrected drawings were received on \_\_\_\_\_ (with a Certificate of Mailing or Transmission dated \_\_\_\_\_), which is after the expiration of the period for reply.
  - (b) ☐ No corrected drawings have been received.
4. ☐ The letter of express abandonment which is signed by the attorney or agent of record, the assignee of the entire interest, or all of the applicants.
5. ☐ The letter of express abandonment which is signed by an attorney or agent (acting in a representative capacity under 37 CFR 1.34(a)) upon the filing of a continuing application.
6. ☐ The decision by the Board of Patent Appeals and Interference rendered on \_\_\_\_\_ and because the period for seeking court review of the decision has expired and there are no allowed claims.
7. ☐ The reason(s) below:

RECEIVED

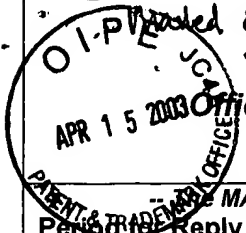
APR 16 2003

Technology Center 2600

Sherrie Hsia  
Primary Examiner  
Art Unit: 2614

Petitions to revive under 37 CFR 1.137(a) or (b), or requests to withdraw the holding of abandonment under 37 CFR 1.181, should be promptly filed to minimize any negative effects on patent term.

9, 10, 11, 12, 13, 23rd



0/15/2002

Office Action Summary

Application No. 09/354,938	Applicant(s) WESTERMAN, LARRY A.
Examiner Sherrie Hsia	Art Unit 2614

THE MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_\_.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-44 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 15-20 and 22-27 is/are allowed.
- 6) ☒ Claim(s) 1,6-8,13,14,21,28-31,36-38 and 40-44 is/are rejected.
- 7) ☒ Claim(s) 2-5,9-12,32-35 and 39 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

RECEIVED  
APR 16 2003  
Technology Center 2600

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 15 July 1999 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2. 6) ☐ Other:

Art Unit: 2614

- ✓ 1. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every
- ✓ feature of the invention specified in the claims. Therefore, the “filtering ...threshold flicker
- ✓ energy” claimed in claim 1, “said threshold flicker energy is adjustable by a user of said display”
- ✓ claimed in claims 6 and 20, “the step of adjusting ... filtered adjustment pixel” claimed in claims
- ✓ 7 and 21, “filtering ...threshold flicker contrast” claimed in claim 8, “said threshold flicker
- ✓ contrast is adjustable by a user of said display” claimed in claims 13 and 27, “the step of
- ✓ adjusting ... filtered adjustment pixel” claimed in claims 14 and 28, “identifying ... computing
- ✓ ... selecting ... for said adjustment pixel” claimed in claims 15 and 22, “computing ...
- ✓ comparing ... filtering ... threshold flicker energy” claimed in claim 29, “computing ...
- ✓ comparing ... filtering ... threshold flicker contrast” claimed in claim 30, “the steps of selecting
- ✓ ... applying ... including said adjustment pixel” claimed in claim 31, “said filter is further
- ✓ adjustable by a user of said display” claimed in claim 36, “said filter is further adjustable as a
- ✓ function ... pixel” claimed in claim 37, “the steps of selecting ... applying ... said adjustment
- ✓ pixel” claimed in claim 38, “the steps of selecting ... applying ... said adjustment pixel” claimed
- ✓ in claim 41, and “the steps of selecting ... applying ... including said adjustment pixel” claimed
- ✓ in claim 42 must be shown or the feature(s) canceled from the claim(s). No new matter should
- ✓ be entered.

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.



Art Unit: 2614

- ✓2. Claims 1, 8, 15, 20, 22, 31, 38, 41 and 42 are objected to because of the following informalities:

In claims 1 and 8, line 2, "after "comprising", --the step of-- should be inserted.

In claims 15 and 22, line 2, "after "comprising", --the steps of-- should be inserted.

In claim 20, line 1, "contrast" should be --energy--.

In claims 31, 38, 41 and 42, line 4, after "pixel", --, -- should be inserted.

In claim 38, line 5, after "function", --of-- should be inserted.

Appropriate correction is required.

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 21, 28-30, 40, 43 and 44 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 21<sup>✓</sup> and 28<sup>✓</sup> recite the limitation "said filtering" in line 1. There is insufficient antecedent basis for this limitation in the claims.

Claim 29<sup>✓</sup> recites the limitation "said flicker energy level" in line 3. There is insufficient antecedent basis for this limitation in the claim.

Claim 30<sup>✓</sup> recites the limitation "said flicker contrast level" in line 3. There is insufficient antecedent basis for this limitation in the claim.

Claim 40<sup>✓</sup> recites the limitation "said background pixel" in line 2. There is insufficient antecedent basis for this limitation in the claim.

Art Unit: 2614

In claim 43, line 1, the dependency is incorrect, "41" should be --42--.

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) do not apply to the examination of this application as the application being examined was not (1) filed on or after November 29, 2000, or (2) voluntarily published under 35 U.S.C. 122(b). Therefore, this application is examined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

Claims 1, 6-8, 13, 14, 31, 36-38, 41 and 42 rejected under 35 U.S.C. 102(e) as being anticipated by Medin.

Medin discloses a method and system for improving image quality on an interlaced video display having the claimed features including filtering an adjustment pixel to reduce a flicker energy or contrast (column 5 line 49- column 6 line 31) and adjusting the filtering of the adjustment pixel (column 6 lines 32-35), and the steps of selecting an adjustment pixel and applying a filter (see column 5 line 4-column 7 line 21).

Art Unit: 2614

5. Claims 2-5, 9-12, 32-35 and 39 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

6. Claims 21, 28, 40, 43 and 44 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

7. Claims 29 and 30 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action.

8. Claims 15-20 and 22-27 appear allowable over prior art.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sherrie Hsia whose telephone number is (703) 305-4738. The examiner can normally be reached on Monday-Thursday from 9:30 AM to 7:00 PM. The examiner can also be reached on alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Miller can be reached on (703) 305-4795.

**Any response to this action should be mailed to:**

Commissioner of Patents and Trademarks  
Washington, D.C. 20231

**Or faxed to:**

**(703) 872-9314 (for Technology Center 2600 only)**

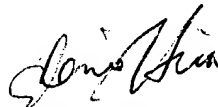
Application/Control Number: 09/354,938

Page 6

Art Unit: 2614

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA., Sixth Floor (Receptionist).

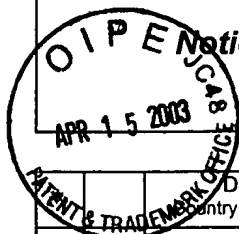
Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is (703) 306-0377.



**Sherrie Hsia**  
**Primary Examiner**  
**Art Unit 2614**

SH

August 12, 2002

**Notice of References Cited**

Application/Control No.

09/354,938

Applicant(s)/Patent Under  
Reexamination  
WESTERMAN, LARRY A.

Examiner

Sherrie Hsia

Art Unit

2614

Page 1 of 1

**U.S. PATENT DOCUMENTS**

		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Name	Classification
	A	US-6,130,723	10-2000	Medin, David	348/607
	B	US-			
	C	US-			
	D	US-			
	E	US-			
	F	US-			
	G	US-			
	H	US-			
	I	US-			
	J	US-			
	K	US-			
	L	US-			
	M	US-			

**FOREIGN PATENT DOCUMENTS**

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Country	Name	Classification
	N					
	O					
	P					
	Q					
	R					
	S					
	T					

**NON-PATENT DOCUMENTS**

*		Include as applicable: Author, Title Date, Publisher, Edition or Volume, Pertinent Pages)
	U	
	V	
	W	
	X	

\*A copy of this reference is not being furnished with this Office action. (See MPEP § 707.05(a).)  
Dates in MM-YYYY format are publication dates. Classifications may be US or foreign.



Attachment for PTO-948 (Rev. 03/01, or earlier)  
6/18/01

The below text replaces the pre-printed text under the heading, "Information on How to Effect Drawing Changes," on the back of the PTO-948 (Rev. 03/01, or earlier) form.

INFORMATION ON HOW TO EFFECT DRAWING CHANGES

1. Correction of Informalities -- 37 CFR 1.85

New corrected drawings must be filed with the changes incorporated therein. Identifying indicia, if provided, should include the title of the invention, inventor's name, and application number, or docket number (if any) if an application number has not been assigned to the application. If this information is provided, it must be placed on the front of each sheet and centered within the top margin. If corrected drawings are required in a Notice of Allowability (PTOL-37), the new drawings **MUST** be filed within the **THREE MONTH** shortened statutory period set for reply in the Notice of Allowability. Extensions of time may NOT be obtained under the provisions of 37 CFR 1.136(a) or (b) for filing the corrected drawings after the mailing of a Notice of Allowability. The drawings should be filed as a separate paper with a transmittal letter addressed to the Official Draftsperson.

2. Corrections other than Informalities Noted by Draftsperson on form PTO-948.

All changes to the drawings, other than informalities noted by the Draftsperson, **MUST** be made in the same manner as above except that, normally, a highlighted (preferably red ink) sketch of the changes to be incorporated into the new drawings **MUST** be approved by the examiner before the application will be allowed. No changes will be permitted to be made, other than correction of informalities, unless the examiner has approved the proposed changes.

Timing of Corrections

Applicant is required to submit the drawing corrections within the time period set in the attached Office communication. See 37 CFR 1.85(a).

Failure to take corrective action within the set period will result in **ABANDONMENT** of the application.

FORM PTO-1449 (Modified)

DEC 20 1999

ATTY. DOCKET NO.  
KLR7146.046SERIAL NO.  
09/354,938LIST OF PATENTS AND PUBLICATIONS FOR  
APPLICANT'S INFORMATION DISCLOSURE  
STATEMENTAPPLICANT  
Larry A. WestermanFILING DATE  
July 15, 1999

GROUP

(Use several sheets if necessary)

## REFERENCE DESIGNATION

## U.S. PATENT DOCUMENTS

EXAMINER INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
GA	AA 4,799,105	01/17/1989	Mitchell et al.	358	160	
	AB 4,888,529	12/19/1989	Madsen et al.	315	370	
	AC 4,947,251	08/07/1990	Hentschel	358	166	
	AD 5,136,385	08/04/1992	Campbell	358		
	AE 5,146,329	09/08/1992	Flamm	358	166	
	AF 5,019,904	05/28/1991	Campbell	358	140	
	AG 5,182,643	01/26/1993	Futscher	358	140	
	AH 5,455,628	10/03/1995	Bishop	348	446	
GA	AI 5,428,456	06/27/1995	Parulski et al.	358	340	
	AJ					
	AK					

## FOREIGN PATENT DOCUMENTS

	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION	
						YES	NO
	AL						
	AM						
	AN						
	AO						

## OTHER ART (Including Author, Title, Date, Pertinent Pages, Etc.)

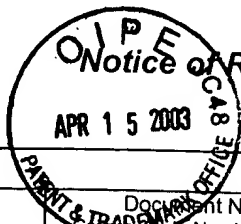
GA	AP	K. R. Boff, L. Kaufman, J. P. Thomas, Handbook of Perception and Human Performance, 1986, Volume 1, pp. 6.1-6.43.
	AQ	
	AR	

EXAMINER

DATE CONSIDERED

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Information Disclosure Statement - PTO-1449 (Modified)  
Added page of



Application/Control No. 09/432,444		Applicant(s)/Patent Under Reexamination DETLEF, MICHAEL J.	
		Examiner Anita Choudhary	Art Unit 2153
Page 1 of 1			

#### U.S. PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Name	Classification
	A	US-5,963,908	10-1999	Chadha, Tejpal	704/273
	B	US-2001/0051978	12-2001	ALLEN et al.	709/203
	C	US-5,774,670	06-1998	Montulli, Lou	709/203
	D	US-5,930,804	07-1999	Yu et al.	707/104
	E	US-6,374,359	04-2002	Shrader et al.	709/229
	F	US-6,226,752	05-2001	Gupta et al.	713/201
	G	US-6,460,079	10-2002	Blumenau, Trevor	709/203
	H	US-			
	I	US-			
	J	US-			
	K	US-			
	L	US-			
	M	US-			

#### FOREIGN PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Country	Name	Classification
	N					
	O					
	P					
	Q					
	R					
	S					
	T					

#### NON-PATENT DOCUMENTS

*		Include as applicable: Author, Title Date, Publisher, Edition or Volume, Pertinent Pages)
	U	St. Laurent, Simon, "Cookies." 1998, McGraw-Hill Professional, New York (pages 50-54).
	V	
	W	
	X	

\*A copy of this reference is not being furnished with this Office action. (See MPEP § 707.05(a).)  
 Dates in MM-YYYY format are publication dates. Classifications may be US or foreign.





Form PTO 948 (Rev. 8-98)

U.S. DEPARTMENT OF COMMERCE - Patent and Trademark Office

Application No. 09/432,444

# NOTICE OF DRAFTSPERSON'S PATENT DRAWING REVIEW

RECEIVED

APR 16 2003

Technology Center 2600

The drawing(s) filed (insert date) 11/02/99 are:

A. ☒ approved by the Draftsperson under 37 CFR 1.84 or 1.152.

B. ☐ objected to by the Draftsperson under 37 CFR 1.84 or 1.152 for the reasons indicated below. The Examiner will require submission of new, corrected drawings when necessary. Corrected drawing must be submitted according to the instructions on the back of this notice.

1. DRAWINGS. 37 CFR 1.84(a): Acceptable categories of drawings:  
Black ink. Color.  
Color drawings are not acceptable until petition is granted. Fig(s) \_\_\_\_\_  
Pencil and non black ink not permitted. Fig(s) \_\_\_\_\_
2. PHOTOGRAPHS. 37 CFR 1.84 (b)  
1 full-tone set is required. Fig(s) \_\_\_\_\_  
Photographs not properly mounted (must use bristol board or photographic double-weight paper). Fig(s) \_\_\_\_\_  
Poor quality (half-tone). Fig(s) \_\_\_\_\_
3. TYPE OF PAPER. 37 CFR 1.84(e)  
Paper not flexible, strong, white, and durable. Fig(s) \_\_\_\_\_  
Erasures, alterations, overwritings, interlineations, folds, copy machine marks not accepted. Fig(s) \_\_\_\_\_  
Mylar, velum paper is not acceptable (too thin). Fig(s) \_\_\_\_\_
4. SIZE OF PAPER. 37 CFR 1.84(f): Acceptable sizes:  
21.0 cm by 29.7 cm (DIN size A4)  
21.6 cm by 27.9 cm (8 1/2 x 11 inches)  
All drawing sheets not the same size. Sheet(s) \_\_\_\_\_  
Drawings sheets not an acceptable size. Fig(s) \_\_\_\_\_
5. MARGINS. 37 CFR 1.84(g): Acceptable margins:  
Top 2.5 cm Left 2.5cm Right 1.5 cm Bottom 1.0 cm  
SIZE: A4 Size
8. ARRANGEMENT OF VIEWS. 37 CFR 1.84(i)  
Words do not appear on a horizontal, left-to-right fashion when page is either upright or turned so that the top becomes the right side, except for graphs. Fig(s) \_\_\_\_\_
9. SCALE. 37 CFR 1.84(k)  
Scale not large enough to show mechanism without crowding when drawing is reduced in size to two-thirds in reproduction. Fig(s) \_\_\_\_\_
10. CHARACTER OF LINES, NUMBERS, & LETTERS. 37 CFR 1.84(i)  
Lines, numbers & letters not uniformly thick and well defined, clean, durable, and black (poor line quality). Fig(s) \_\_\_\_\_
11. SHADING. 37 CFR 1.84(m)  
Solid black areas pale. Fig(s) \_\_\_\_\_  
Solid black shading not permitted. Fig(s) \_\_\_\_\_  
Shade lines, pale, rough and blurred. Fig(s) \_\_\_\_\_
12. NUMBERS, LETTERS, & REFERENCE CHARACTERS. 37 CFR 1.84(p)  
Numbers and reference characters not plain and legible. Fig(s) \_\_\_\_\_  
Figure legends are poor. Fig(s) \_\_\_\_\_  
Numbers and reference characters not oriented in the same direction as the view. 37 CFR 1.84(p)(1) Fig(s) \_\_\_\_\_

**RECEIVED**

**APR 16 2003**

**Technology Center 2600**

**EXHIBIT C**



RECEIVED

APR 16 2003

Technology Center 2600

**Receipt is hereby acknowledged by the USPTO:**

Amendment Transmittal Form;  
Fee Transmittal 2003 in duplicate;  
Amendment;  
Petition for THREE Month Extension;  
Check in the amount of \$2,058 to cover fees; and an  
Acknowledgment Postcard.

Serial No. 09/354,938  
Applicant: Larry Westerman  
Title: A METHOD OF ELIMINATING FLICKER ON  
AN INTERLACED MONITOR  
Filed: July 15, 1999  
  
Sharp 7146.0046  
KLR:djs  
February 5, 2003



259378



Receipt is hereby acknowledged by the USPTO:

Amendment Transmittal Form;  
Fee Transmittal 2003 in duplicate;  
Amendment;  
Petition for THREE Month Extension;  
Check in the amount of \$2,058 to cover fees; and an  
Acknowledgment Postcard.

Serial No. 09/354,938  
Applicant: Larry Westerman  
Title: A METHOD OF ELIMINATING FLICKER ON  
AN INTERLACED MONITOR  
Filed: July 15, 1999  
  
Sharp 7146.0046  
KLR:djs  
February 5, 2003

RECEIVED

APR 16 2003

Technology Center 2000

6 ORIGINAL DOCUMENT PRINTED ON CHEMICAL REACTIVE PAPER WITH MICROPRINTED BORDER - SEE REVERSE SIDE FOR COMPLETE SECURITY FEATURES 6

RNOFF, VILHAUER, McCLUNG & STENZEL, LLP  
1600 ODS TOWER  
601 S.W. SECOND AVENUE  
PORTLAND, OREGON 97204-3157

EXPLANATION	AMOUNT
Sharp	
Pat No. 09/354,938	
A METHOD OF ELIMINATING FLICKER	
ON AN INTERLACED MONITOR	
7146	

24/22/1230

62784

The sum of 2,058 dollars 00 cents

DOLLARS

CHECK  
AMOUNT

TO THE ORDER OF

DESCRIPTION

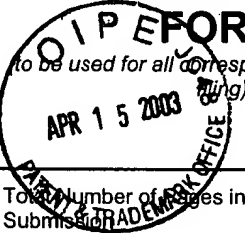
CHECK  
NUMBER

\$ 2,058.00

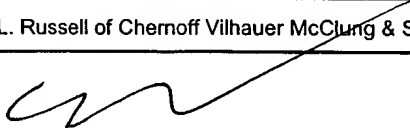
usbank. PORTLAND, OREGON

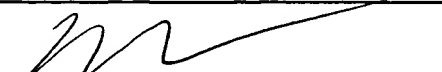
THIS DOCUMENT CONTAINS HEAT SENSITIVE INK. TOUCH OR PRESS HERE - RED IMAGE DISAPPEARS WITH HEAT.

062784 12300022015360609998

<b>TRANSMITTAL</b> <b>FORM</b> <i>(to be used for all correspondence after initial filing)</i> 		<b>Application Number</b>	09/354,938
		<b>Filing Date</b>	July 15, 1999
		<b>First Named Inventor</b>	Larry Westerman
		<b>Group Art Unit</b>	2614
		<b>Examiner Name</b>	Sherrie Hsia
Total Number of Pages in this Submission: _____		<b>Attorney Docket Number</b>	7146.0046

ENCLOSURES (check all that apply)		
<input checked="" type="checkbox"/> Fee transmittal Fee attached form <input checked="" type="checkbox"/> Amendment <input type="checkbox"/> After Final/ Response <input type="checkbox"/> Affidavits/Declaration(s) <input checked="" type="checkbox"/> Extension of Time Request <input type="checkbox"/> Express Abandonment Request <input type="checkbox"/> Information Disclosure Statement <input type="checkbox"/> Certified copy of Priority Documents <input type="checkbox"/> Response to Missing Parts/ Incomplete Application <input type="checkbox"/> Response to Missing Parts Under 37 CFR 1.52 or 1.53	<input type="checkbox"/> Assignment Papers (for an application) <input checked="" type="checkbox"/> Drawing(s) <input type="checkbox"/> Licensing Related Papers <input type="checkbox"/> Petition Routing Slip (PTO/SB/69) and Accompanying Petition <input type="checkbox"/> Petition to Convert to a Provisional Application <input type="checkbox"/> Power of Attorney, Revocation, Change of Correspondence Address <input type="checkbox"/> Terminal Disclaimer <input type="checkbox"/> Small Entity Statement <input type="checkbox"/> Request for Refund	<input type="checkbox"/> After Allowance Communication to Group <input type="checkbox"/> Appeal Communication to Board of Appeals and Interferences <input type="checkbox"/> Appeal Communication to Group (Appeal Notice, Brief, Reply Brief) <input type="checkbox"/> Proprietary Information <input type="checkbox"/> Status Letter <input checked="" type="checkbox"/> Additional Enclosures (identify below) Acknowledgment Postcard
Remarks:		<b>RECEIVED</b> <b>APR 16 2003</b> Technology Center 2600

SIGNATURE OF APPLICANT, ATTORNEY OR AGENT	
<b>Firm or Individual Name</b>	Kevin L. Russell of Chernoff Vilhauer McClung & Stenzel, LLP
<b>Signature</b>	
<b>Date</b>	February 5, 2003

CERTIFICATE OF MAILING			
I hereby certify that, on the date shown below, this correspondence is being deposited with the United States Postal Service in an envelope addressed to: Assistant Commissioner for Patents, Washington, D.C., 20231 <input checked="" type="checkbox"/> with sufficient postage as first class mail <input type="checkbox"/> as "Express Mail Post Office to Addressee" - mailing label no. _____			
<b>Type or print name</b>	Kevin L. Russell		
<b>Signature</b>		<b>Date</b>	February 5, 2003

# FEE TRANSMITTAL for FY 2003

Patent fees are subject to annual revision.

Complete If Known

Application Number 09/354,938

Filing Date July 15, 1999

First Named Inventor Larry Westerman

Examiner Name Sherrie Hsia

Art Unit 2614

Attorney Docket No. 7146.0046

RECEIVED

APR 16 2003

Technology Center 2600

☐ Applicant claims small entity status. See 37CFR 1.27

TOTAL AMOUNT OF PAYMENT \$2,058

## METHOD OF PAYMENT (check all that apply)

☐ Check ☐ Credit Card ☐ Money Order ☐ Other ☐ None

☐ Deposit Account

Deposit Account Number 03-1550

Deposit Account Name Chernoff Vilhauer McClung & Stenzel

The Commissioner is authorized to: (check all that apply)

☐ Charge fees indicated below ☒ Credit any overpayments

☒ Charge any additional fee(s) during the pendency of this application

☐ Charge any fee(s) indicated below, except for the filing fee to the above-identified deposit account.

## FEE CALCULATION

### 1. BASIC FILING FEE

Large Entity	Small Entity	Fee Description	Fee Paid
Code (\$)	Code (\$)		
1001 750	2001 375	Utility filing fee	
1002 330	2002 165	Design filing fee	
1003 520	2003 260	Plant filing fee	
1004 750	2004 375	Reissue filing fee	
1005 160	2005 80	Provisional filing fee	
SUBTOTAL (1)			\$0

### 2. EXTRA CLAIM FEES FOR UTILITY AND REISSUE

Total Claims	Indep. Claims	Multiple Dependent	Extra Claims	Fee from below	Fee Paid
16	10		x	18	= 288
			x	84	= 840
					= 0

Large Entity	Small Entity	Fee Description	Fee Paid
Fee Code (\$)	Fee Code (\$)		
1202 18	2202 9	Claims in excess of 20	
1201 84	2201 42	Independent claims in excess of 3	
1203 280	2203 140	Multiple dependent claim, if not paid	
1204 84	2204 42	**Reissue independent claims over original patent	
1205 18	2205 9	*Reissue claims in excess of 20 and over original patent	

SUBTOTAL (2) \$1,128

\*\*or number of previously paid, if greater. For reissues, see above.

## FEE CALCULATION (continued)

### 3. ADDITIONAL FEES

Large Entity	Small Entity	Fee Description	Fee Paid
Fee Code (\$)	Fee Code (\$)		
1051 130	2051 65	Surcharge - late filing fee or oath	
1052 50	2052 25	Surcharge-late provisional filing fee or cover sheet	
1053 130	1053 130	Non-English specification	
1812 2,520	1812 2,520	For filing a request for ex-parte reexamination	
1804 920*	1804 920*	Requesting publication of SIR prior to Examiner action	
1805 1840*	1805 1840*	Requesting publication of SIR after Examiner action	
1251 110	2251 55	Extension for reply within first month	
1252 410	2252 205	Extension for reply within second month	
1253 930	2253 465	Extension for reply within third month	930
1254 1,450	2254 725	Extension for reply within fourth month	
1255 1,970	2255 985	Extension for reply within fifth month	
1401 320	2401 160	Notice of Appeal	
1402 320	2402 160	Filing a brief in support of an appeal	
1403 280	2403 140	Request for oral hearing	
1451 1,510	1451 1,510	Petition to institute a public use proceeding	
1452 110	2452 55	Petition to revive - unavoidable	
1453 1,300	2453 650	Petition to revive - unintentional	
1501 1,300	2501 650	Utility issue fee (or reissue)	
1502 470	2502 235	Design issue fee	
1503 630	2503 315	Plant issue fee	
1460 130	1460 130	Petitions to the Commissioner	
1807 50	1807 50	Processing fee under 37 CFR 1.17(q)	
1806 180	1806 180	Submission of Information Disclosure Stmt.	
8021 40	8021 40	Recording each patent assignment per property (times number of properties)	
1809 750	2809 375	Filing a submission after final rejection (37 C.F.R. 1.129(a))	
1810 750	2810 375	For each additional invention to be examined (37 CFR 1.129(b))	
1801 750	2801 375	Request for Continued Examination (RCE)	
1802 900	1802 900	Request for expedited examination of a design application	

Other fee (specify)

\* Reduced by Basic Filing Fee Paid

SUBTOTAL (3) \$930

## SUBMITTED BY

Complete (if applicable)

Name (print type)

Registration No.

Telephone

(503) 227-5631

Signature

Date

February 5, 2003

FEE TRANSMITTAL for FY 2003				Complete if Known					
<div><div>APR 15 2003</div><div>APR 15 2003</div><div>APR 15 2003</div></div> <p>Patent fees are subject to annual revision.</p> <p>Applicant claims small entity status. See 37CFR 1.27</p> <p><b>TOTAL AMOUNT OF PAYMENT</b> \$2,058</p>				Application Number	09/354,938				
				Filing Date	July 15, 1999				
				First Named Inventor	Larry Westerman				
				Examiner Name	Sherrie Hsia				
				Art Unit	2614				
				Attorney Docket No.	7146.0046				
<b>METHOD OF PAYMENT</b> (check all that apply)				<b>FEE CALCULATION</b> (continued)					
<input type="checkbox"/> Check <input type="checkbox"/> Credit Card <input type="checkbox"/> Money Order <input type="checkbox"/> Other <input type="checkbox"/> None				<b>3. ADDITIONAL FEES</b>					
<input type="checkbox"/> Deposit Account				<b>Large Entity</b> <b>Small Entity</b>					
Deposit Account Number 03-1550				Fee Code	Fee (\$)	Fee Code	Fee (\$)	Fee Description	Fee Paid
Deposit Account Name Chernoff Vilhauer McClung & Stenzel				1051	130	2051	65	Surcharge - late filing fee or oath	
The Commissioner is authorized to: (check all that apply)				1052	50	2052	25	Surcharge-late provisional filing fee or cover sheet	
<input type="checkbox"/> Charge fees indicated below <input checked="" type="checkbox"/> Credit any overpayments				1053	130	1053	130	Non-English specification	
<input checked="" type="checkbox"/> Charge any additional fee(s) during the pendency of this application				1812	2,520	1812	2,520	For filing a request for ex-parte reexamination	
<input type="checkbox"/> Charge any fee(s) indicated below, except for the filing fee to the above-identified deposit account.				1804	920*	1804	920*	Requesting publication of SIR prior to Examiner action	
<b>FEE CALCULATION</b>				1805	1840*	1805	1840*	Requesting publication of SIR after Examiner action	
<b>1. BASIC FILING FEE</b>				1251	110	2251	55	Extension for reply within first month	
Large Entity	Small Entity	Fee Description	Fee Paid	1252	410	2252	205	Extension for reply within second month	
Code (\$)	Code (\$)			1253	930	2253	465	Extension for reply within third month	930
1001 750	2001 375	Utility filing fee		1254	1,450	2254	725	Extension for reply within fourth month	
1002 330	2002 165	Design filing fee		1255	1,970	2255	985	Extension for reply within fifth month	
1003 520	2003 260	Plant filing fee		1401	320	2401	160	Notice of Appeal	
1004 750	2004 375	Reissue filing fee		1402	320	2402	160	Filing a brief in support of an appeal	
1005 160	2005 80	Provisional filing fee		1403	280	2403	140	Request for oral hearing	
SUBTOTAL (1)			\$0	1451	1,510	1451	1,510	Petition to institute a public use proceeding	
<b>2. EXTRA CLAIM FEES FOR UTILITY AND REISSUE</b>				1452	110	2452	55	Petition to revive - unavoidable	
Total Claims 16 x 18 = 288				1453	1,300	2453	650	Petition to revive - unintentional	
Indep. Claims 10 x 84 = 840				1501	1,300	2501	650	Utility issue fee (or reissue)	
Multiple Dependent 0 = 0				1502	470	2502	235	Design issue fee	
Large Entity	Small Entity	Fee Description	Fee Paid	1503	630	2503	315	Plant issue fee	
Fee Code (\$)	Fee Code (\$)			1460	130	1460	130	Petitions to the Commissioner	
1202 18	2202 9	Claims in excess of 20		1807	50	1807	50	Processing fee under 37 CFR 1.17(q)	
1201 84	2201 42	Independent claims in excess of 3		1806	180	1806	180	Submission of Information Disclosure Stmt.	
1203 280	2203 140	Multiple dependent claim, if not paid		8021	40	8021	40	Recording each patent assignment per property (times number of properties)	
1204 84	2204 42	**Reissue independent claims over original patent		1809	750	2809	375	Filing a submission after final rejection (37 C.F.R. 1.129(a))	
1205 18	2205 9	*Reissue claims in excess of 20 and over original patent		1810	750	2810	375	For each additional invention to be examined (37 CFR 1.129(b))	
SUBTOTAL (2)			\$1,128	1801	750	2801	375	Request for Continued Examination (RCE)	
**or number of previously paid, if greater. For reissues, see above.				1802	900	1802	900	Request for expedited examination of a design application	
				Other fee (specify)					
				* Reduced by Basic Filing Fee Paid					
				SUBTOTAL (3)				\$930	
<b>SUBMITTED BY</b>				<b>Complete (if applicable)</b>					
Name (print type)				Registration No.			Telephone	(503) 227-5631	
Signature				Date			Date	February 5, 2003	



ATTORNEY DOCKET NO. KLR 7146.0046

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**  
**PATENT APPLICATION EXAMINING OPERATIONS**

**RECEIVED**

Applicant: Larry Westerman.

Group Art Unit: 2614

APR 16 2003

Serial No: 09/354,938

Examiner: Sherrie Hsia

Technology Center 2600

Filed: July 15, 1999

Title: A METHOD OF ELIMINATING FLICKER ON AN INTERLACED MONITOR

**AMENDMENT**

Chernoff, Vilhauer, McClung & Stenzel, LLP  
1600 ODS Tower  
601 SW Second Avenue  
Portland, Oregon 97204

February 5, 2003

Commissioner for Patents  
Washington, D.C. 20231

Dear Sir:

In response to the Office Action dated August 15, 2002, please consider the following amendment and remarks regarding the above-identified patent application:

**In the Specification:**

At the end of the brief description of the drawings please insert the following:

FIGS. 6-15 illustrate image processing techniques.



In the Claims :

Please amend the claims as follows:

1 (Amended). A method of reducing flicker from a display presenting an interlaced image comprising the step of filtering an adjustment pixel to reduce a flicker energy of said adjustment pixel to an energy at least equal to a predetermined threshold flicker energy.

8 (Amended). A method of reducing flicker from a display presenting an interlaced image comprising filtering a signal for an adjustment pixel to reduce a flicker contrast of said adjustment pixel to a contrast at least equal to a predetermined threshold flicker contrast.

15 (Amended). A method of reducing flicker from a display presenting an interlaced image comprising the steps of:

- (a) identifying an adjustment pixel in a plurality of pixels of approximately equal intensity and arrayed for approximately horizontal presentation on said display, said adjustment pixel having an intensity different from a background pixel vertically displaced from said adjustment pixel;
- (b) computing a flicker energy of said adjustment pixel; and
- (c) selecting a filter to reduce said flicker energy of said adjustment pixel to an energy less than a threshold flicker energy for said adjustment pixel.

20 (Amended). The method of claim 15 wherein said threshold flicker energy is adjustable by a user of said display.

21 (Amended). The method of claim 15 further comprising the step of adjusting said filter for said adjustment pixel in response to filtering applied to an earlier filtered adjustment pixel.

22 (Amended). A method of reducing flicker of a display presenting an interlaced image comprising the steps of:

- (a) identifying an adjustment pixel in a plurality of pixels of approximately equal intensity and arrayed for approximately horizontal presentation on said display, said adjustment pixel having an intensity different from an intensity of a background pixel vertically displaced from said adjustment pixel;
- (b) computing a flicker contrast of said adjustment pixel; and
- (c) selecting a filter to reduce said flicker contrast of said adjustment pixel to a contrast less than a threshold flicker contrast for said adjustment pixel.

28 (Amended). The method of claim 22 further comprising the step of adjusting said filter for said adjustment pixel in response to filtering applied to an earlier filtered adjustment pixel.

29 (Amended). A method of reducing flickering of a horizontal intensity discontinuity on a display presenting an interlaced image comprising:

- (a) computing a flicker energy for an adjustment pixel said flicker energy being a function of a ratio of an intensity of said adjustment pixel and an intensity of a background pixel vertically adjacent to said adjustment pixel, a number of horizontal intensity discontinuities in a vertical vicinity of said adjustment pixel, and a length of said horizontal intensity discontinuity;
- (b) comparing said flicker energy level to a threshold flicker energy; and
- (c) filtering a signal for said adjustment pixel to reduce said flicker energy to an energy at least equal to said threshold flicker energy.

30 (Amended). A method of reducing flickering of a horizontal intensity discontinuity on a display presenting an interlaced image comprising:

- (a) computing a flicker contrast for an adjustment pixel said flicker contrast being a function of a ratio of the difference of an intensity of said adjustment pixel and an intensity of a background pixel vertically displaced from said adjustment pixel and a sum of said intensities, a number of horizontal intensity discontinuities in a vertical vicinity of said adjustment pixel, and a length of said horizontal intensity discontinuity;
- (b) comparing said flicker contrast to a threshold flicker contrast; and
- (c) filtering a signal for said adjustment pixel to reduce said flicker contrast to a contrast at least equal to said threshold flicker contrast.

31 (Amended). A method of reducing flicker on a display presenting an interlaced image comprising the steps of:

- (a) selecting an adjustment pixel of said image; and
- (b) applying a filter to at least said adjustment pixel, said filter being adjusted, at least in part, on the basis of at least one of;
  - (i) a logarithmic based function of an intensity of said adjustment pixel and an intensity of another pixel vertically displaced from said adjustment pixel;
  - (ii) a function of a number of intensity transitions vertically displaced from said adjustment pixel; and
  - (iii) a function of a length of an approximately horizontal plurality of pixels of approximately equal intensity including said adjustment pixel.

38 (Amended). A method of reducing flicker on a display presenting an interlaced image comprising the steps of:

- (a) selecting an adjustment pixel of said image; and
- (b) applying a filter to at least said adjustment pixel, said filter being adjusted, at least in part, on the basis of a logarithmic based function of an intensity of said adjustment pixel and an intensity of another pixel vertically displaced from said adjustment pixel.

40 (Amended). The method of claim 38 wherein said function of said intensities of said adjustment pixel and said another pixel is a ratio of the difference and the sum of said intensities.

41 (Amended). A method of reducing flicker on a display presenting an interlaced image comprising the steps of:

- (a) selecting an adjustment pixel of said image; and
- (b) applying a filter to at least said adjustment pixel, said filter being adjusted, at least in part, on the basis of a function of [a number of] intensity transitions vertically displaced from said adjustment pixel.

42 (Amended). A method of reducing flicker on a display presenting an interlaced image comprising the steps of:

- (a) selecting an adjustment pixel of said image; and
- (b) applying a filter to at least said adjustment pixel, said filter being adjusted, at least in part, on the basis of a function of a length of an approximately horizontal plurality of pixels of approximately equal intensity including said adjustment pixel.

43 (Amended). The method of claim 42 wherein said function of said length of said approximately horizontal plurality of pixels comprises a ratio of a number of said pixels included in said plurality and said number of said pixels plus a constant.

44 (Amended). The method of claim 43 wherein said constant has a first value if an intensity of said adjustment pixel is greater than an intensity of another pixel vertically displaced relative to said adjustment pixel and a second value if said intensity of said adjustment pixel is less than said intensity of said another pixel.

Please add the following new claims:

45. A method of reducing flicker from a display presenting an interlaced image comprising the step of filtering an adjustment pixel to reduce a flicker energy of said adjustment pixel to an energy at least equal to a threshold flicker energy, wherein said flicker energy is a function of an intensity of said adjustment pixel and an intensity of another pixel vertically displaced from said adjustment pixel, a number of intensity transitions vertically displaced from said adjustment pixel, and a length of an approximately horizontal plurality of pixels of approximately equal intensity including said adjustment pixel.

46. A method of reducing flicker from a display presenting an interlaced image comprising the step of filtering an adjustment pixel to reduce a flicker energy of said adjustment pixel to an energy at least equal to a threshold flicker energy, wherein said function of said intensities of said adjustment pixel and said another pixel is a logarithm of a ratio of said intensities.

47. A method of reducing flicker from a display presenting an interlaced image comprising the step of filtering an adjustment pixel to reduce a flicker energy of said adjustment pixel to an energy at least equal to a threshold flicker energy, wherein said function of said length of said approximately horizontal plurality of pixels comprises a ratio of a number of said pixels included in said plurality and said number of said pixels plus a constant.

48. The method of claim 47 wherein said constant has a first value if said intensity of said adjustment pixel is greater than said intensity of said another pixel and a second value if said intensity of said adjustment pixel is less than said intensity of said another pixel.

49. A method of reducing flicker from a display presenting an interlaced image comprising filtering a signal for an adjustment pixel to reduce a flicker contrast of said adjustment pixel to a contrast at least equal to a threshold flicker contrast, wherein said flicker contrast is a function of an intensity of said adjustment pixel and an intensity of another pixel vertically displaced from said adjustment pixel, a number of intensity transitions vertically displaced from said adjustment pixel, and a length of an approximately horizontal plurality of pixels of approximately equal intensity including said adjustment pixel.

50. The method of claim 49 wherein said function of said intensities of said adjustment pixel and said another pixel is a ratio of the difference and the sum of said intensities of said adjustment pixel and said another pixel.

51. The method of claim 49 wherein said function of said length of said approximately horizontal plurality of pixels comprises a ratio of a number of said pixels included in said approximately horizontal plurality of pixels and said number of said pixels plus a constant.

52. The method of claim 51 wherein said constant has a first value if said intensity of said adjustment pixel is greater than said intensity of said another pixel and a second value if said intensity of said adjustment pixel is less than said intensity of said another pixel.

53. A method of reducing flicker on a display presenting an interlaced image comprising the steps of:

- (a) selecting an adjustment pixel of said image; and

- (b) applying a filter to at least said adjustment pixel said filter being adjusted, at least in part, on the basis of at least one of;
  - (i) a function of an intensity of said adjustment pixel and an intensity of another pixel vertically displaced from said adjustment pixel;
  - (ii) a function of a number of intensity transitions vertically displaced from said adjustment pixel; and
  - (iii) a function of a length of an approximately horizontal plurality of pixels of approximately equal intensity including said adjustment pixel, wherein said function of said intensities of said adjustment pixel and said another pixel is a logarithm of a ratio of said intensities.

54. A method of reducing flicker on a display presenting an interlaced image comprising the steps of:

- (a) selecting an adjustment pixel of said image; and
- (b) applying a filter to at least said adjustment pixel said filter being adjusted, at least in part, on the basis of at least one of;
  - (i) a function of an intensity of said adjustment pixel and an intensity of another pixel vertically displaced from said adjustment pixel;
  - (ii) a function of a number of intensity transitions vertically displaced from said adjustment pixel; and
  - (iii) a function of a length of an approximately horizontal plurality of pixels of approximately equal intensity including said adjustment pixel, wherein said function of said intensities of said adjustment pixel and said another pixel is a ratio of the difference and the sum of said intensities.

55. A method of reducing flicker on a display presenting an interlaced image comprising the steps of:

- (a) selecting an adjustment pixel of said image; and
- (b) applying a filter to at least said adjustment pixel said filter being adjusted, at least in part, on the basis of at least one of;
  - (i) a function of an intensity of said adjustment pixel and an intensity of another pixel vertically displaced from said adjustment pixel;
  - (ii) a function of a number of intensity transitions vertically displaced from said adjustment pixel; and
  - (iii) a function of a length of an approximately horizontal plurality of pixels of approximately equal intensity including said adjustment pixel, wherein said function of said length of said approximately horizontal plurality of pixels comprises a ratio of a number of said pixels included in said plurality and said number of said pixels plus a constant.

56. The method of claim 55 wherein said constant has a first value if said intensity of said adjustment pixel is greater than said intensity of said another pixel and a second value if said intensity of said adjustment pixel is less than said intensity of said another pixel.

57. A method of reducing flicker on a display presenting an interlaced image comprising the steps of:

- (a) selecting an adjustment pixel of said image; and
- (b) applying a filter to at least said adjustment pixel said filter being adjusted, at least in part, on the basis of a function an intensity of said adjustment pixel and an intensity of another pixel vertically displaced from said adjustment pixel, wherein said function of said intensities of said



adjustment pixel and said another pixel is a logarithm of a ratio of said intensities.

58. A method of reducing flicker on a display presenting an interlaced image comprising the steps of:

- (a) selecting an adjustment pixel of said image; and
- (b) applying a filter to at least said adjustment pixel said filter being adjusted, at least in part, on the basis of a function an intensity of said adjustment pixel and an intensity of another pixel vertically displaced from said adjustment pixel, wherein said function of said intensities of said adjustment pixel and said background pixel is a ratio of the difference and the sum of said intensities.

59. A method of reducing flicker on a display presenting an interlaced image comprising the steps of:

- (a) selecting an adjustment pixel of said image; and
- (b) applying a filter to at least said adjustment pixel, said filter being adjusted, at least in part, on the basis of a function of a length of an approximately horizontal plurality of pixels of approximately equal intensity including said adjustment pixel, wherein said function of said length of said approximately horizontal plurality of pixels comprises a ratio of a number of said pixels included in said plurality and said number of said pixels plus a constant.

60. The method of claim 59 wherein said constant has a first value if an intensity of said adjustment pixel is greater than an intensity of another pixel vertically adjacent to said adjustment pixel and a second value if said intensity of said adjustment pixel is less than said intensity of said another pixel.

### REMARKS

The drawings have been amended, as suggested by the Examiner. No new matter has been added.

The Examiner objected to claims 1, 8, 15, 20, 22, 31, 38, 41, and 42. The Examiner objected to claims 21, 28-30, 30, 43, and 44. The referenced claims have been amended as indicated to correct informalities.

The Examiner indicated that claims 2-5, 9-12, 21, 28, 32-35, 39, 40, 43, and 44 would be allowable if rewritten in independent form.

Claim 2 has been rewritten as new claim 45.

Claim 3 has been rewritten as new claim 46.

Claim 4 has been rewritten as new claim 47.

Claim 5 has been rewritten as new claim 48.

Claim 9 has been rewritten as new claim 49.

Claim 10 has been rewritten as new claim 50.

Claim 11 has been rewritten as new claim 51.

Claim 12 has been rewritten as new claim 52.

Claim 32 has been rewritten as new claim 53.

Claim 33 has been rewritten as new claim 54.

Claim 34 has been rewritten as new claim 55.

Claim 35 has been rewritten as new claim 56.

Claim 39 has been rewritten as new claim 57.

Claim 40 has been rewritten as new claim 58.

Claim 43 has been rewritten as new claim 59.

Claim 44 has been rewritten as new claim 60.

The Examiner rejected claims 1, 6-8, 13, 14, 31, 36-38, 41, and 42 under 35 U.S.C. 102(e) as being anticipated by Medin, U.S. Patent No. 6,130,723.

Medin discloses a method for reducing flicker within an interlaced image by identifying an area of the interlaced image where flicker needs to be reduced and adaptively

adjusting a pattern of pixels derived from a non-interlaced spacial relationship of the interlaced image within the area based upon characteristics of the image. A flicker filter uses an adaptive technique whereby pixel-blending characteristic are constantly changed within the image depending on particular image attributes. See, Medin, Abstract. The flicker reduction filter operates on a vertical filter principal just like the standard 2-line or 3-line flicker filters. The filter is adaptive in that constant changes occur in the filter weighting coefficients, depending on image luminance characteristics measured in the immediate area being processed by the filter. In addition, different filter characteristics are applied to the luminance and chrominance characteristics of the image. See, Medin, column 5, lines 4-16. Principally, Medin discloses a technique for adjusting the filtering of a pixel by applying a filter with different filter weighting coefficients based upon luminance characteristics measured in the immediate area.

Claim 1 has been amended to more clearly patentably distinguish over Medin by claiming reducing a flicker energy of the adjustment pixel to an energy at least equal to a predetermined threshold flicker energy.

Medin discloses applying an adaptive filter but provides no teaching to what the magnitude of the flicker energy is for a particular image. Without any quantification of the magnitude of the flicker energy, Medin similarly provides no teaching as to how to adapt the filter to reduce the flicker energy below a predetermined threshold. In contrast, Medin merely applies a filter to the pixels with no quantification of the result nor expectation of the resulting effect.

Claims 2-5 depend from claim 1, either directly or indirectly, and are patentable for the same reasons asserted for claim 1.

Claim 6 has been amended to more clearly patentably distinguish over Medin by claiming reducing a flicker contrast of the adjustment pixel to an energy at least equal to a predetermined threshold flicker contrast.

Medin discloses applying an adaptive filter but provides no teaching to what the magnitude of the flicker energy is for a particular image nor any measure of flicker contrast. Without any quantification of the magnitude of the flicker contrast, Medin similarly provides no

teaching as to how to adapt the filter to reduce the flicker contrast below a predetermined threshold. In contrast, Medin merely applies a filter to the pixels with no quantification of the result nor expectation of the resulting effect.

Claims 7-14 depend from claim 6, either directly or indirectly, and are patentable for the same reasons asserted for claim 6.

Claim 31 has been amended to include a logarithmic based function to patentably distinguish over Medin.

Claims 32-37 depend from claim 31, either directly or indirectly, and are patentable for the same reasons asserted for claim 31.

Claim 38 has been amended to include a logarithmic based function to patentably distinguish over Medin.

Claims 39-40 depend from claim 38 and are patentable for the same reasons asserted for claim 38.

Claim 41 patentably distinguishes over Medin by claiming reducing flicker by applying a filter being adjusted, at least in part, on the basis of a function of intensity transitions vertically displaced from the adjustment pixel.

Medin discloses applying an adaptive filter by varying the weighting applied to the pixels in some manner. However, Medin does not each varying the weighting as a function of intensity transitions.

Claim 42 patentably distinguishes over Medin by claiming reducing flicker by applying a filter being adjusted, at least in part, on the basis of a function of a length of an approximately horizontal plurality of pixels of approximately equal intensity including the adjustment pixel.

Medin discloses adjusting flicker filter coefficients based on image feature width and average brightness. See, Medin, column 6, lines 32-35. Medin fails to suggest that the pixels are of approximately equal intensity. Further, Medil teaches away from suggesting that the pixels are of approximately equal intensity by suggesting the determination of an average brightness, thus implying the pixels are not approximately equal intensity.

Claims 43 and 44 depend from claim 42, either directly or indirectly, and are patentable for the same reasons asserted for claim 42.

The Examiner is respectfully requested to reconsider the claims and to pass the application to issue.

Respectfully submitted,



---

Kevin L. Russell  
Reg. No. 38,292  
Attorneys for Applicant  
Telephone: (503) 227-5631

**CERTIFICATE OF MAILING**

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail postage prepaid in an envelope addressed to: Box Patent Application, Commissioner for Patents, Washington, D.C. 20231 on February 5, 2003.

Dated: February 5, 2003



---

Kevin L. Russell

APPENDIX

1 (Amended). A method of reducing flicker from a display presenting an interlaced image comprising the step of filtering an adjustment pixel to reduce a flicker energy of said adjustment pixel to an energy at least equal to a predetermined threshold flicker energy.

8 (Amended). A method of reducing flicker from a display presenting an interlaced image comprising filtering a signal for an adjustment pixel to reduce a flicker contrast of said adjustment pixel to a contrast at least equal to a predetermined threshold flicker contrast.

15 (Amended). A method of reducing flicker from a display presenting an interlaced image comprising the steps of:

- (a) identifying an adjustment pixel in a plurality of pixels of approximately equal intensity and arrayed for approximately horizontal presentation on said display, said adjustment pixel having an intensity different from a background pixel vertically displaced from said adjustment pixel;
- (b) computing a flicker energy of said adjustment pixel; and
- (c) selecting a filter to reduce said flicker energy of said adjustment pixel to an energy less than a threshold flicker energy for said adjustment pixel.

20 (Amended). The method of claim 15 wherein said threshold flicker [contrast] energy is adjustable by a user of said display.

21 (Amended). The method of claim 15 further comprising the step of adjusting said filter for [filtering of] said adjustment pixel in response to filtering applied to an earlier filtered adjustment pixel.

22 (Amended). A method of reducing flicker of a display presenting an interlaced image comprising the steps of:

- (a) identifying an adjustment pixel in a plurality of pixels of approximately equal intensity and arrayed for approximately horizontal presentation on said display, said adjustment pixel having an intensity different from an intensity of a background pixel vertically displaced from said adjustment pixel;
- (b) computing a flicker contrast of said adjustment pixel; and
- (c) selecting a filter to reduce said flicker contrast of said adjustment pixel to a contrast less than a threshold flicker contrast for said adjustment pixel.

28 (Amended). The method of claim 22 further comprising the step of adjusting said filter for [filtering of] said adjustment pixel in response to filtering applied to an earlier filtered adjustment pixel.

29 (Amended). A method of reducing flickering of a horizontal intensity discontinuity on a display presenting an interlaced image comprising:

- (a) computing a flicker energy for an adjustment pixel said flicker energy [level] being a function of a ratio of an intensity of said adjustment pixel and an intensity of a background pixel vertically adjacent to said adjustment pixel, a number of horizontal intensity discontinuities in a vertical vicinity of said adjustment pixel, and a length of said horizontal intensity discontinuity;
- (b) comparing said flicker energy level to a threshold flicker energy; and
- (c) filtering a signal for said adjustment pixel to reduce said flicker energy to an energy at least equal to said threshold flicker energy.

30 (Amended). A method of reducing flickering of a horizontal intensity discontinuity on a display presenting an interlaced image comprising:

- (a) computing a flicker contrast for an adjustment pixel said flicker contrast [level] being a function of a ratio of the difference of an intensity of said adjustment pixel and an intensity of a background pixel vertically displaced from said adjustment pixel and a sum of said intensities, a number of horizontal intensity discontinuities in a vertical vicinity of said adjustment pixel, and a length of said horizontal intensity discontinuity;
- (b) comparing said flicker contrast to a threshold flicker contrast; and
- (c) filtering a signal for said adjustment pixel to reduce said flicker contrast to a contrast at least equal to said threshold flicker contrast.

31 (Amended). A method of reducing flicker on a display presenting an interlaced image comprising the steps of:

- (a) selecting an adjustment pixel of said image; and
- (b) applying a filter to at least said adjustment pixel, said filter being adjusted, at least in part, on the basis of at least one of;
  - (i) a logarithmic based function of an intensity of said adjustment pixel and an intensity of another pixel vertically displaced from said adjustment pixel;
  - (ii) a function of a number of intensity transitions vertically displaced from said adjustment pixel; and
  - (iii) a function of a length of an approximately horizontal plurality of pixels of approximately equal intensity including said adjustment pixel.

38 (Amended). A method of reducing flicker on a display presenting an interlaced image comprising the steps of:



- (a) selecting an adjustment pixel of said image; and
- (b) applying a filter to at least said adjustment pixel, said filter being adjusted, at least in part, on the basis of a logarithmic based function of an intensity of said adjustment pixel and an intensity of another pixel vertically displaced from said adjustment pixel.

40 (Amended). The method of claim 38 wherein said function of said intensities of said adjustment pixel and said [background] another pixel is a ratio of the difference and the sum of said intensities.

41 (Amended). A method of reducing flicker on a display presenting an interlaced image comprising the steps of:

- (a) selecting an adjustment pixel of said image; and
- (b) applying a filter to at least said adjustment pixel, said filter being adjusted, at least in part, on the basis of function of [a number of] intensity transitions vertically displaced from said adjustment pixel.

42 (Amended). A method of reducing flicker on a display presenting an interlaced image comprising the steps of:

- (a) selecting an adjustment pixel of said image; and
- (b) applying a filter to at least said adjustment pixel, said filter being adjusted, at least in part, on the basis of a function of a length of an approximately horizontal plurality of pixels of approximately equal intensity including said adjustment pixel.

43 (Amended). The method of claim [41] 42 wherein said function of said length of said approximately horizontal plurality of pixels comprises a ratio of a number of said pixels included in said plurality and said number of said pixels plus a constant.

44 (Amended). The method of claim 43 wherein said constant has a first value if an intensity of said adjustment pixel is greater than an intensity of another pixel vertically [adjacent to ] displaced relative to said adjustment pixel and a second value if said intensity of said adjustment pixel is less than said intensity of said another pixel.



ATTORNEY DOCKET NO. 7146.0046

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE  
PATENT APPLICATION EXAMINING OPERATIONS

Applicant: Larry Westerman                      Group Art Unit:  
Serial No.: 09/354,938                      Examiner: Sherrie Hsia  
Filed: July 15, 1999  
Title: A METHOD OF ELIMINATING FLICKER ON AN INTERLACED MONITOR

**PETITION FOR EXTENSION OF TIME**

Chernoff, Vilhauer, McClung & Stenzel, LLP  
1600 ODS Tower  
601 SW Second Avenue  
Portland, Oregon 97204-3157

February 5, 2003

Commissioner for Patents  
Washington, D.C. 20231

Dear Sir:

The applicant in the above-identified patent application hereby petitions the Commissioner of Patents and Trademarks for a THREE month extension of time in accordance with 37 CFR §1.136 to respond to the Office Action therein dated August 15, 2002. The applicant is a large entity and, in accordance with 37 CFR §1.17, a fee in the amount of \$930 is enclosed.

The Commissioner is hereby authorized to charge any additional fee, or credit any overpayment, to Deposit Account No. 03-1550.

Respectfully submitted,

Kevin L. Russell  
Of Attorneys for Applicant  
Tel: (503) 227-5631



ATTORNEY DOCKET NO. 7146.0046

### CERTIFICATE OF MAILING

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail postage prepaid in an envelope addressed to: Commissioner for Patents, Washington, D.C. 20231 on February 5, 2003.

Dated: February 5, 2003

\_\_\_\_\_  
Kevin L. Russell



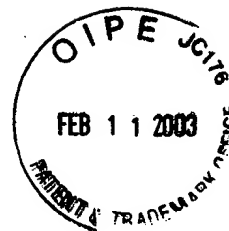
Receipt is hereby acknowledged by the USPTO:

Letter to Official Draftsperson;  
New Drawings (3 pages); and an  
Acknowledgment Postcard.

Serial No. 09/354,938  
Applicant: Larry Westerman  
Title: A METHOD OF ELIMINATING FLICKER  
ON AN INTERLACED MONITOR  
Filed: July 15, 1999

Sharp 7146.0046  
KLR:djs  
February 5, 2003

259278



Receipt is hereby acknowledged by the USPTO:

Letter to Official Draftsperson;  
New Drawings (3 pages); and an  
Acknowledgment Postcard.

Serial No. 09/354,938  
Applicant: Larry Westerman  
Title: A METHOD OF ELIMINATING FLICKER  
ON AN INTERLACED MONITOR  
Filed: July 15, 1999

Sharp 7146.0046  
KLR:djs  
February 5, 2003



Practitioner's Docket No. KLR 7146.0046

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Larry Westerman.

Group Art Unit: 2614

Serial No: 09/354,938

Examiner: Sherrie Hsia

Filed: July 15, 1999

Title: A METHOD OF ELIMINATING FLICKER ON AN INTERLACED MONITOR

February 5, 2003

Assistant Commissioner of Patents  
Washington, D.C. 20231

RECEIVED

APR 16 2003

Technology Center 2600

TRANSMITTAL OF FORMAL DRAWINGS

The drawings have been amended in accordance with the Examiner's comments  
in response to the Office Action dated August 15, 2002, and are enclosed herewith

Number of sheets of drawings submitted: 3.

Kevin L. Russell, Reg. No. 38,292

Chernoff, Vilhauer, McClung & Stenzel, LLP  
1600 ODS Tower  
601 SW Second Avenue, Portland, OR 97204  
Tel. No. (503) 227-5631

CERTIFICATE OF UNDER 37 CFR §§ 1.8(a) and 1.10

I hereby certify that, on the date shown below, this correspondence is being:

- ☒ deposited with the United States Postal Service in an envelope addressed to: Assistant Commissioner  
for Patents, Washington, D.C., 20231
- ☒ with sufficient postage as first class mail
- ☐ as "Express Mail Post Office to Addressee" - mailing label no. \_\_\_\_\_
- ☐ transmitted by facsimile to the Patent and Trademark Office

Date: February 5, 2003

  
Kevin L. Russell

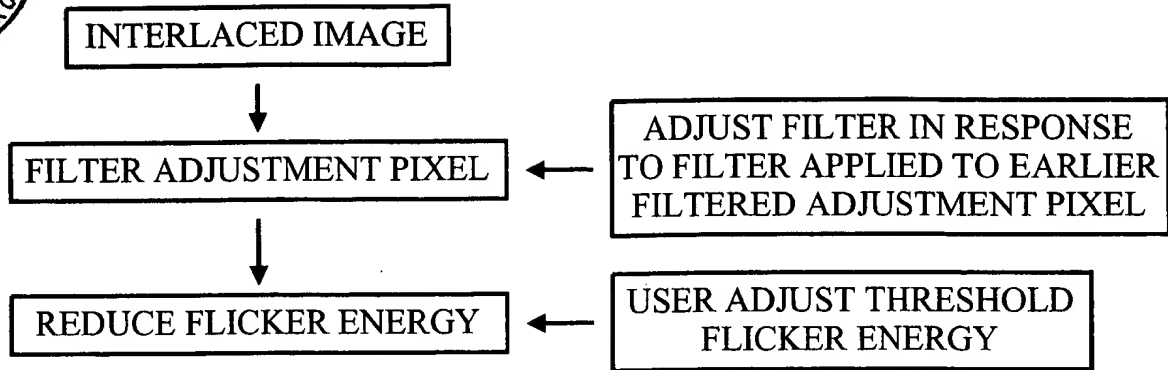


FIG. 6

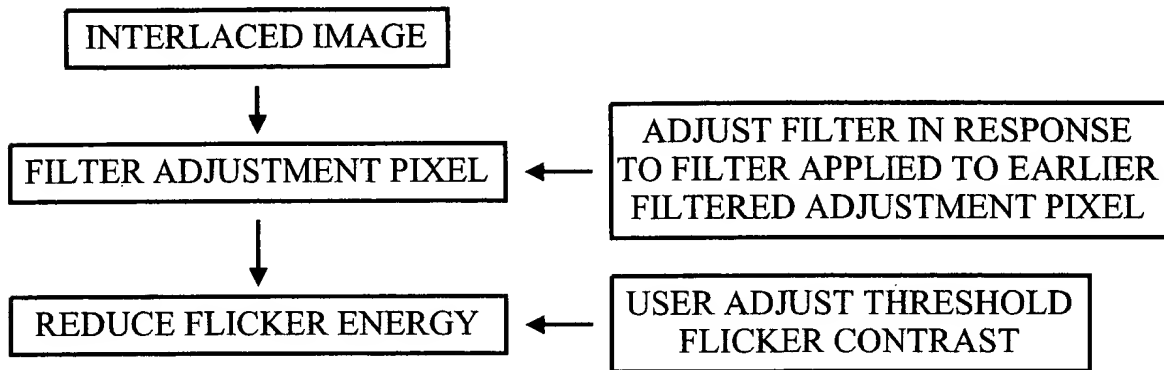


FIG. 7

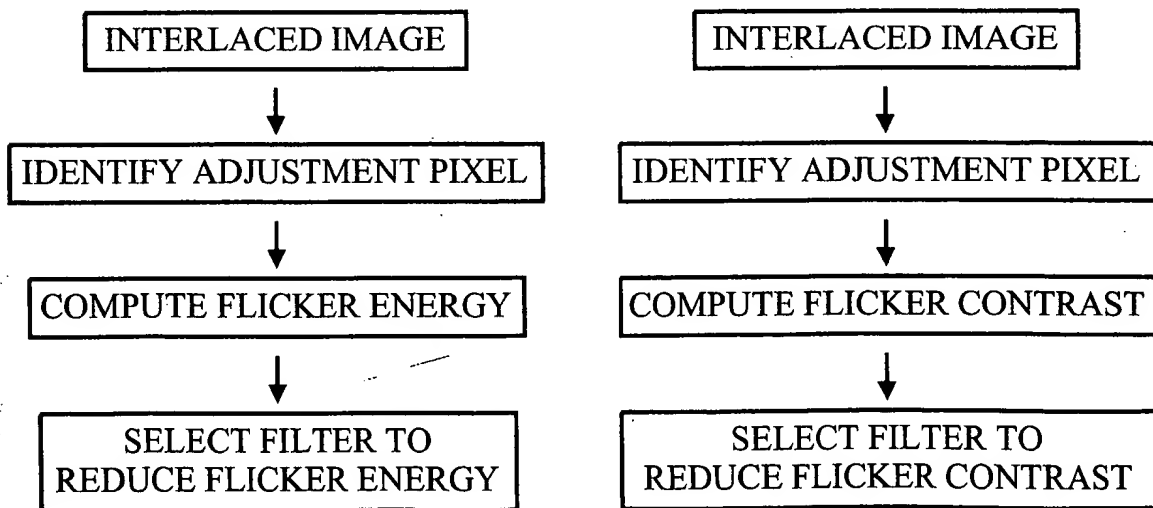


FIG. 8

FIG. 9

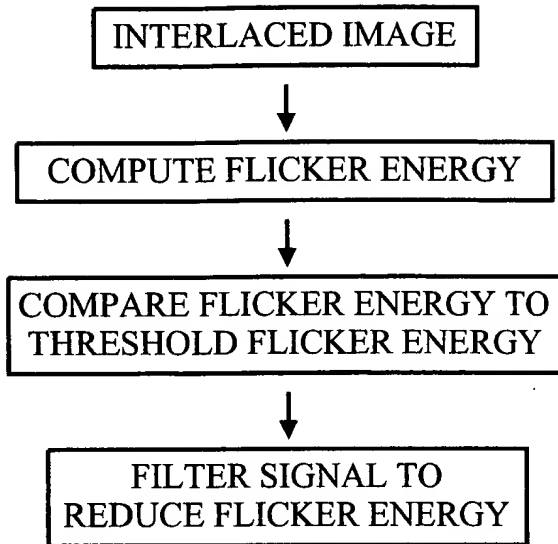


FIG. 10

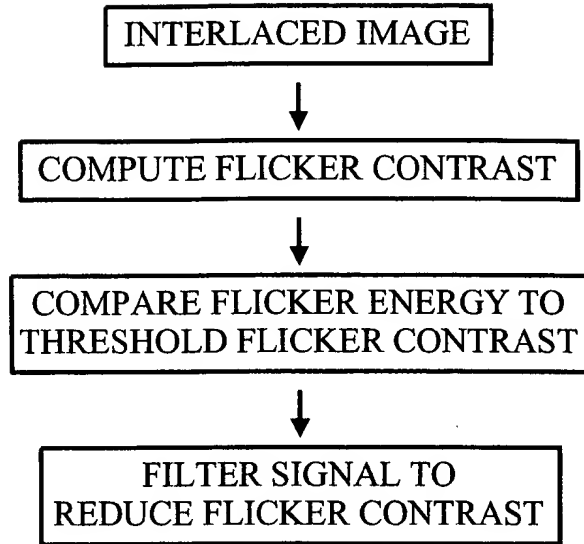


FIG. 11

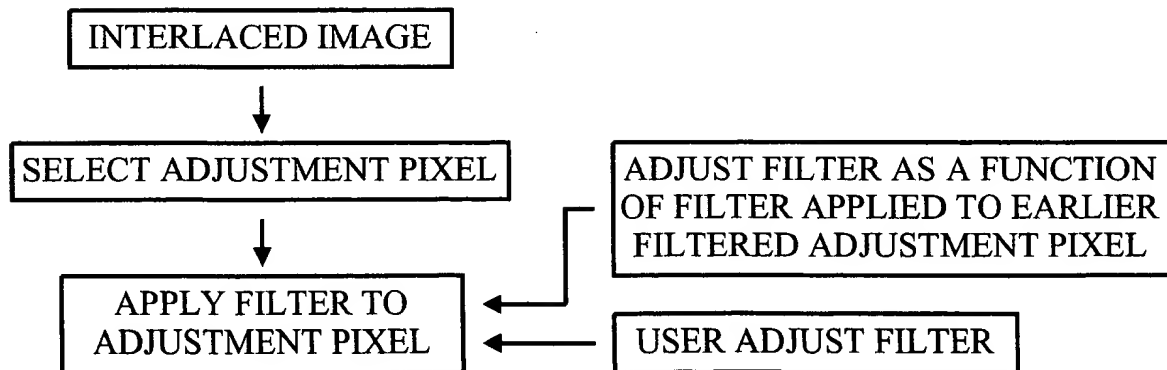


FIG. 12



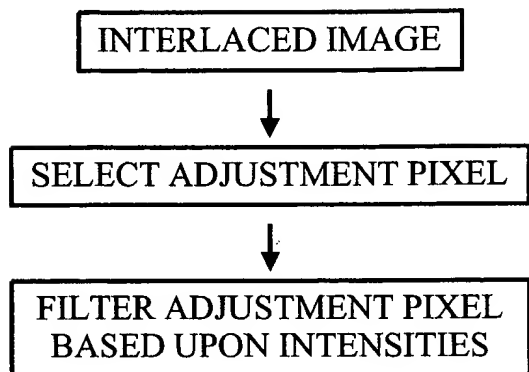


FIG. 13

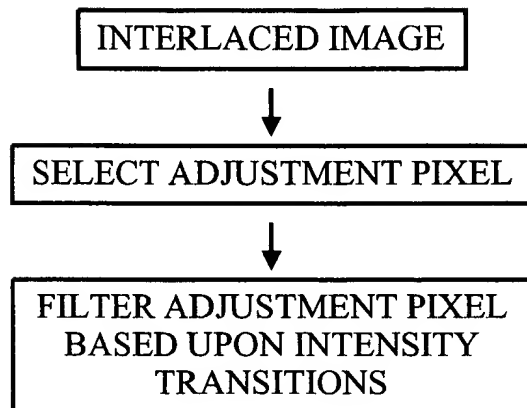


FIG. 14

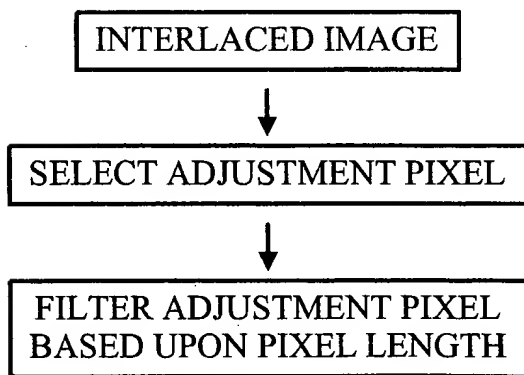


FIG. 15